PCIe x4 Active Optic Cable

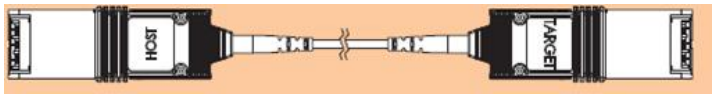
Fiber optic cable with PCIe x4 connectors.
OSS-PCIe-CBL-ACT-x4-3M
OSS-PCIe-CBL-ACT-x4-300M

Available in 3m and 300m lengths

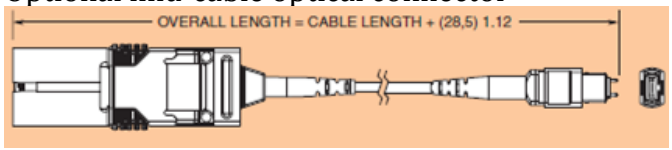
- Four independent, full-duplex optical channels
- Supports Gen 1 and Gen 2 data rates to 300m and Gen 3 rates to 100m
- Male or female MTP optical connector mid-cable termination available
- Bit Error Rate better than 10-15
- Lightweight 3mm diameter fiber ribbon cable up to 300 meters
- Supports PCIe® auxiliary signaling (CPWRON, CPERST#, CPRSNT#, CWAKE#)
- OM2 optical cable up to 50m, OM3 cable for lengths greater than 50m

TECHNICAL SPECIFICATIONS

PCIe x4 Active Optic Cable	
Cable Length	3m, 300m
Data Transfer Rates	PCIe Gen 1 – 10Gb/s PCIe Gen 2 – 20Gb/s PCIe Gen 3 – 32Gb/s
Gender	Male-Male
Temperature Range	Case operating 0º to 70ºC
Lock to Mating Part	Yes
Fiber Cable Diameter	3.0mm
Wire/Cable Type	Round



Optional mid-cable optical connector



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PCIe® x4 Connector Pin Assignment					
GND	A1			B1	GND
PET p0	A2	Transmitter Lane 0	Receiver Lane 0	B2	PER p0
PET n0	A3	Transmitter Lane 0	Receiver Lane 0	B3	PER n0
GND	A4			B4	GND
PET p1	A5	Transmitter Lane 1	Receiver Lane 1	B5	PER p1
PET n1	A6	Transmitter Lane 1	Receiver Lane 1	B6	PER n1
GND	A7			B7	GND
PET p2	A8	Transmitter Lane 2	Receiver Lane 2	B8	PER p2
PET n2	A9	Transmitter Lane 2	Receiver Lane 2	B9	PER n2
GND	A10			B10	GND
PET p3	A11	Transmitter Lane 3	Receiver Lane 3	B11	PER p3
PET n3	A12	Transmitter Lane 3	Receiver Lane 3	B12	PER n3
GND	A13			B13	GND
CREFCLK+	A14	See Notes 1, 2	See Note 3	B14	3.3 V PWR
CREFCLK-	A15	See Notes 1, 2	See Note 3	B15	3.3 V PWR
GND	A16		See Note 4	B16	PWR RTN
SB_RTN	A17		See Note 4	B17	PWR RTN
CPRSNT#	A18	See Note 1	See Note 1	B18	CWAKE#
CPWRON	A19	See Note 1	See Note 1	B19	CPERST#

[1] Propagation of the reference clock is directional. Target side of AOC is an input and host side is an output. The clock is not passed through the cable and is instead recreated in the target end.
[2] Standard product produces a 100 MHz clock; 100.3 MHz and no clock AOCs can be ordered (see Ordering Information).
[3] Must be connected to 3.3 V (+/-5%) Vaux or Vmain
[4] Must be connected to Power Ground

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